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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,216	09/18/2003	Hideo Sano	3796.P0042US	8302
23474 7590 02/17/2009 FLYNN THIEL BOUTELL & TANIS, P.C. 2026 RAMBLING ROAD KALAMAZOO, MI 49008-1631			EXAMINER YANG, JIE	
			ART UNIT 1793	PAPER NUMBER
			MAIL DATE 02/17/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/666,216

Applicant(s)

SANO ET AL.

Examiner

JIE YANG

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 2-3 are cancelled; claim 13 is added as new claims, and claims 1, 4-13 are pending in application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the instant case, as disclosed in the instant specification, claimed distance range(the bearing of the solid die at a distance of 9-15mm in the instant claim 1) is not in the original disclosouse and it is not proper to pick the claimed range 9 to 15mm form the discoused range of 5 mm or more as recited in the original specification; The "consist of" language in the instant claim12 is also not included in the original discloses. Therefore, there is no literal support for these features.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4 -13 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP04000353 A (JP'353) in view of JP2002-317255 (JP'255).

JP'353 in view JP'255 is applied to the claims 1 and 4-12 for the same reason as stated in the previous rejection dated 5/13/2008.

Regarding the newly added claim 13, which depends on claim 9 and includes the similar limitation as recited in claims 5 or 10. As discussed in the previous office action marked 12/26/2007, JP'353 teaches substantially the same process steps of homogenizing, cooling, extruding, solution heating, and aging processes, for example homogenizing prior to extrusion at temperature near 500°C and cooling at a rate ≥ 10 (translation p1), and solution heat treating after extruding by heating to 495-510°C, and artificially aging at 160-180°C for 2-8hr (translation p5) to obtain a T6 temper (translation p6).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP04000353 A (JP'353) in view of JP2002-317255 (JP'255) and further in view of JP07-041897 (JP'897).

JP'353 in view JP'255 and JP'897 is applied to the claim 6 for the same reason as stated in the previous rejection dated 5/13/2008.

Response to Arguments

The Declaration filed on 1/8/2009 under 37 CFR 1.132 has been considered but is insufficient to overcome the rejections of claim 12 based upon 35 U.S.C 103(a) as set forth in the last office action because: firstly, the "Declaration under 37 CFR 1.132" can not overcome the "new matter" issue; Secondly, the Applicant declares using aluminum alloys with different Fe (0.1, 0.2, and 0.4wt%) under the similar test conditions having obtained different corrosion results and the Applicant concludes that lower Fe (0.1 or 0.2wt%) alloy has lower corrosion compared with high Fe (0.4wt%) sample. However, the Examiner notices the prior art, JP'353, also teaches aluminum alloy with lower Fe (table 1 samples 1-3 and 5-10), which would lead to the same lower corrosion property as recited in the instant invention.

Applicant's arguments, see "applicant arguments/remarks", filed 1/16/2009, with respect to the rejections for claims under 35 U.S.C. 103(a) have been fully considered and are not persuasive.

Applicant argues:

1) JP'353 does not disclose a specific alloy composition falling within the scope of the present claims nor does it disclose the specific apparatus limitations required by the present claims. From the comparison between samples 1 and 8 of JP'353 and B and F of the instant invention, the alloys of the present invention have an unexpectedly higher tensile and yield strength than the alloys of JP'353 due to the apparatus limitations and compositional requirements of the present claims.

2) Refer to the previous Declaration filed on 10/22/2007 under 37 CFR 1.132, the inner circumferential surface of the guide hole of the flow guide being separated from an outer circumferential surface of the orifice which is continued with the bearing of the solid die was set at a distance of 4mm, 5mm, 9mm, 12mm, 15mm, and 17mm. When the flow guide was set to 17mm, the end of the former billet was cut. The declaration provides an evidence that a distance of flow guide range from 9 to 15mm is critical to the instant invention.

3) JP'255 and JP'897 have different copper content compared with the instant claims. A difference in copper content is a clearly unobvious difference as one of ordinary skill in the art would not expect that aluminum alloys containing such a different copper content would have similar properties.

In response,

Regarding the argument 1), as pointed out in the previous offices action marked 12/26/2007 and 5/13/2008, JP'353 teaches a process of extruding an aluminum alloy, with alloying ranges of Si, Mg, Cu, and Mn that substantially overlaps the alloy

composition in the instant claims 1 and 4 as well as equations 1-4, which is a prima facie case of obviousness. SEE MPEP 2144.05 I. It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the claimed compositions Si, Mg, Cu, Mn, and Al from the composition disclosed by JP'353 because JP'353 discloses the same process of extruding an aluminum alloy throughout the disclosed ranges. The Examiner further notices the samples of 2-7 and 9-10 of JP'353 (tables 3-4 of JP'353) having the similar high strength as the claimed alloy.

Regarding the argument 2), as discussed in the rejection under 35 U.S.C. 112, first paragraph above, the claimed distance range (the bearing of the solid die at a distance of 9-15mm in the instant claim 1) is not in the original disclosure. It is not proper to pick the 9 to 15mm from the Declaration. The Declaration can not overcome the "new matter" issue. The Applicants refer MPEP 2163.05 to argue the changes of the scope of the claims. The Examiner notices that in the sample of range limitations of MPEP 2163.05 III, the ranges described in the original specification should include both a general range and a specific examples range for conditionally change the claimed scope. In *re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

Regarding the argument 3, the Examiner disagrees with the argument. As pointed out in the previous office action marked 12/26/2007 and 5/13/2008, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the instant case, JP'353 in view JP'255 teaches the composition and apparatus limitations

as recited in the instant claims. JP'353 teaches the composition which substantially overlaps the alloy composition in the instant claims. JP'255 and JP'897 are cited for the extruding apparatus for aluminum alloys. The detail discussion and motivation for the combination could refer to the rejection listed above and the previous offices action marked 12/26/2007 and 5/13/2008.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jie Yang whose telephone number is 571-2701884. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-2721244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JY

/Roy King/
Supervisory Patent Examiner, Art Unit 1793